



SWIMMING POOL PLAN REQUIREMENTS Effective May 1, 2007

1. Plot plans dimensioned and drawn to a reasonable scale and showing at least the following:
 - A. Property lines, easements, right-of-way of record, and overhead utilities.
 - B. Existing structures, fences, retaining walls, irregular grades (2-1 slope or greater), and other relevant characteristics adjacent to the pool/spa or waterscape area. When ever the water line of the pool/waterscape is less than 5 feet from a property line or a structure a detailed cross section will be required showing at least the following:
 - 1) Grade to property line/structure
 - 2) Design and location of footings for structure, fence/retaining wall, house, etc.
 - 3) Grade of adjacent property
 - 4) Pool wall, raised bond beam, spa, waterfall, etc.
 - C. The proposed pool/spa or waterscape, shape and type, dimensioned and located to show setbacks, side yards and clearances from existing structures adjacent to the pool/spa or waterscape area.
 - D. The proposed mechanical equipment pad dimensioned location in the relation to setbacks and side yards.
 - E. All diving and deck equipment items if included.
 - F. The proposed deck work configuration showing its anticipated drainage.
2. A structural working plan showing at least the following:
 - A. The type of construction.
 - B. The pool/spa or waterscape dimensions, including the depth, surface area, and adequate cross-sections drawn to scale.
 - C. Computations, stress diagrams, and other data sufficient to show the correctness of the plans, including the reinforcing steel schedule and detail, if applicable.
 - D. Contractor's structural calculations (stamped and signed by a registered engineer) for pool, spas, spa dam walls, raised bond beams, surcharges (within five feet of structures or property lines), waterscape and all other unusual conditions.
 - E. Detailed working drawings of the items listed in D, which shall be stamped and signed by the engineer of record and show:
 - 1) Plan view
 - 2) Cross sections
 - 3) Reinforcing steel size
 - 4) Reinforcing steel spacing
 - 5) Thickness of walls
 - F. The Building Department will accept wet-stamped and signed calculations and working drawings for repetitive use. These originals will be kept on file by the Building

Department. These documents can be used by any contractor for repetitive use with written approval from the engineer of record. The original letter will also be kept on file with the Building Department. When submitting plans for permits, the need for wet-stamped calculations will not be required.

G. For approval of the original calculations:

- 1) Submit two wet-stamped sets of calculations and working drawings for the Building Department's review and approval. This is for approval only—not for the issuance of permits.
- 2) After approval, the responsible party (engineer or contractor) will pay the review fees and pick up their approved set from the Building Department. The Building Department will keep a file set of calculations.

NOTE: The structural calculations are to be used to substantiate the drawings not to replace them; separate detailed drawings are required.

3. A mechanical plan showing at least the following:

- A. The volume, system flow rate in gallons per minute (GPM's) and turn over in hours.
- B. The type and size of filtration system and the means of waste disposal.
- C. The type and size of the pool heater, including the method of venting and provisions for combustion air, if applicable.
- D. A pool piping schedule listing the types of materials and size of materials being used, and showing the location of the main outlets, surface skimmers, and inlets.
- E. The means of adding make-up water.
- F. The size, length, material and routing of the gas line from source to heater, if applicable.
- G. The size and location of existing electrical service.

4. An electrical load calculation will be required if the size of the main electrical service is **less** than 200 AMP or two (2) or more pumps are installed.

5. Serious problems have been experienced with large rocks and boulders being backfilled into trenches containing plumbing lines. This practice violates Section 315.4 of the 2006 Uniform Plumbing Code. Therefore, all underground installation of plumbing lines to include water supply, drain, vacuum and circulating lines and gas piping systems shall be installed on a minimum 3-inch (3") base with 4-inch (4") cover of clean sand (2006 Southern Nevada Pool Code).

6. Soils Information: The Clark County Soil Guidelines Map identified five (5) different geo-technical areas. These areas are Purple, Blue, Yellow, Brown, and Tan. As the pool contractor, you are to identify which geo-technical area applies to your permit application.

- A. The Tan and Purple areas **do not** require any geo-technical investigations and standard pool designs (calculations) are acceptable with the exception of any pool built north of Ann Road or east of Maryland Parkway (see paragraph 6C below).
- B. The Blue, Yellow, and Brown areas **do** require special geo-technical consideration. Standard pool calculations will be accepted in lieu of a geo-technical investigation for these areas. The pool calculations, however, must be accompanied by a letter wet-

signed and stamped by the design engineer stating that the design takes into account the special geo-technical considerations of these areas.

- C. Soils reports are required for pools built north of Ann Road, and also for any pool built east of Maryland Parkway. You may choose to exercise "Option A" or "Option B".
 - 1) Option A: Have the structural designer clearly state in a cover letter to accompany the pool plans that the pool and deck have been designed for worst-case soil conditions. In this instance, no further soils report will be required.
 - 2) Option B: Provide a site-specific soils report for the property. If you wish, you may obtain an "excavation only" permit without a soils report, but no inspections will be performed, and no pool permit will be issued until the site-specific soil report is received.

7. When submitting plans for permits:

- A. Submit two (2) copies of the site plans, engineer/city-approved detail working drawings, and engineer's approval letter.
- B. Submit one (1) copy of the engineer/city-approved calculations. Please note:
 - 1) Two (2) copies of wet-stamped calculations and detail drawings must be submitted for site-specific conditions.
 - 2) All submittals must be complete – even if others are doing the work.

NOTE: FOR PLANS PROVIDED BY A CONTRACTOR: List contractor's name, license number, and name of person who prepared plans in a prominent location on the front sheet of each set of plans. The original signature of the contractor shall accompany this information. In the case of electrical or plumbing work, the signature must be that of the Master or Qualified Employee.

NOTE: FOR PLANS PREPARED BY AN OWNER/BUILDER: List owner's name that prepared plans in a prominent location on each sheet of each set of plans. The original signature of the owner/builder should accompany this information.

NOTE: *Effective July 1, 1999*, field inspectors began checking mix design tickets to confirm that the mix delivered to the jobsite is what is specified by the engineer's calculations. Be sure to have your delivery ticket available for the #910 inspection.

NOTE: *Effective July 1, 1999*, 15 feet of block wall may be removed to build a pool, on the same permit. After the pool is completed, the wall must be restored to code compliance.